

FIG. 1

10 30 50
GTGAAGAACGAAAAACCTTCTTTGAAGAGCTTTACGAGGCTTTAGAGGAAACCCACGAC
M K N E K T F F E E L Y E A L E E T H D
70 90 110
AACACCGATGCCACTAGGGGGTCAGATAGGGGGTCAGAGGACTTCTTCTTGGCCACCGAC
N T D A T R G S D R G S E D F F L A T D
130 150 170
CCCCCTCCAGATGGAGGTGCCGAAATCGCCTCGGAAGGGCTTTACATACCAAAAAGAG
P P P D G G A E N R L A K G F T Y Q K E
190 210 230
GCACTTAGGATTGCTTTACCCGAGAAAGACCATGAGGCTTTCTTTCTCTGTTGGGGCC
A L R I A L P E K D H E A F L S S V G A
250 270 290
CCCCCTATACCACAGCTGAACCCCCGTTGGGAATGTATGTCAAGCCGTCAGGACGGG
P P I P P A E P P V G N V C Q A V Q D G
310 330 350
CCTCAGAAGCTTCTGGAACCTCTCCAGGAGATTGCCCGCTCCACCATCCCCTACGGCAAC
P Q K L L E L L Q E I A R S T I P Y G N
370 390 410
CGGGAGCTCTGGAGGAAGGTGGGGACGGTCTTCTTCATGGTCCCCCTGGAGATGTTGGCC
R E L W R K V G T V V F M V P L E M L A
430 450 470
CTCAACCTGGGGGTACCCGGCAGACCGTCCACGCTGGAAGAAGGTCTTGAGAAAAAG
L N L G V T R Q T V H A W K K V L E K K
490 510 530
GGCCTGGTGGCCACCGACGTCTTACCAAACCGTCAACGGGGAGCGCCGGGCCATCGGC
G L V A T D V L H Q T V N G E R R A I G
550 570 590
ACCCCTTGGGCCGTCCGGCTGAGGCCAGGGAAAGCCAGGCTCACCTGGACGACTACATC
T L W A V R L R P G K A R L T L D D Y I
610 630 650
TACCCCTGGAGGAACCTCGCCCTAGACATGGCCAACGGCGTCTCTCTTCAACTGGGTC
Y P W R N L A L D M A N G V L S F N W V
670 690 710
AAGGCCTACCAGGACCACGAATCCGCCACCCTGGACGTGCTGCTCTCTGGGCTCAG
K A Y Q D H G I R P T L D V L V L W A Q
730 750 770
GGGAAAAGGGTGATGCCAACACCAAGACCGTGGCCGTTGACCTGGGCCTCATCCTGGTC
G K R V M P N T K T V A V D L G L I L V
790 810 830
CTCCCCGAGGTGGAGCGTTCCAAACTCCCGGCCCTTATCACCTCATTGCTACGTACATT
L P E V E R S K L P A L I T L I A T Y I
850 870 890
GCCGATCTCCTAGATGACCGTCGTTCAAGACGTTTCTATGCAGGCTTGCTGTGGGCTGTG
A D L L D D R R S R R F Y A G L L W A V
910 930 950
GCCAGGGGTGAACCTCCCGCGCAATATCTATTTGCCGTCCTAATGCGGGTTATCCGAGAT
A R G E L P A Q Y L F A V L M R V I R D
970 990 1010
TACACGGATGGCCATCTGACACGACCGGGAGCGTACCTAGTGAAGACCCTCAAGGAGGCC
Y T D G H L T R P G A Y L V K T L K E A

TCCTGA
S *



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FIG. 2

1 CTATAACGGCCTTTTAGGAGGGGGGATTGCCAGCCGCTGGGCTGACGGTTATTTGGACC
61 CATAAAAGGCGAAACCGAGGCGGTTGCCCGGATCACCCCAAGACCTAGGGTAACGCC
121 TCGGGCTCCAGATGACAAGGAGGTCCGAGGGTGAAGAACGAAAAACCTTCTTTGAAGAG
M K N E K T F F...(RepT)



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FIG. 3A

1 tctagaaggt caggggtggac aaggaaaaaca ccatagcccc tgccaagaag atggacgagt
61 tgggtgtccgg aaaagtggcc atccggggcg ctcctgacaa ctattttcca gcggtggcca
121 ccggcattgg ccacgaggta cgaagcttgtg gtagtagacgg ccacaaaggg gtcgtctca
181 aacttctttt ctagtgccgc ttggacgaag gggaggaaga ggaaaggctt catggcctca
241 cctccttccc ctcctccttg gcggccttag cggcgtaaaa ctcctgagacg gcctgaagtt
301 tagggatttc gctttcgggg ataagaatcc ggcggtcag gggatgccgg atggccctta
361 tccgtccgtc ccttatgtac tcgtaaatgg tggccttggg tactttaaac cgttctgaaa
421 ctctctaac agagagcaca aaacctctaa aaacctatca atccccaccga ttccagtata
481 ccataaatgg cacaaagttt tgagaaggtg gtcaaacaaa aaggctttct cggtcagggtt
541 atggtgaggt gggggcggtc aaaggccgac ttaagtttgg taaagccggg aggaagcaaa
601 ccgggggtgt accatgcaac agatggccga gtggaacgtg tggacacaga gaagcgttga
661 gcttctggag aaggggtatt tgataaaact actgcaggtc tataaagggg aaagtggctc
721 ttcgaggta gtaccagagg aggtagagga aaaacttcgc gaggcctaca aggcatacga
781 ggggaggcag gatagtccgg aggcagaaac gaaactcgtg gaagccgtgc taaatgccag
841 aaaaaaggtc gagcgggtccc ccttcaatca cccctacctg cctttgggtc actacctgtt
901 ttcgaaaaa gcagaaaaag cgaacaaggc ccttgaggag gcattgcagg aggttgccctc
961 aaagcaccca gaaacatcc gcgtcctggc caaggaagcg caaagaagag gcgtagaagc
1021 cttgatccaa aggtcgaagg agcctcccga aataaatcgg cagatagggc cgatgttcaa
1081 aaggtgttac aaagaagagc taaaggggaa aatagaagag aggcctccag gccctacca
1141 accaaagatt gtggtagtat cccctgaaaa aagtaaaccg gagcaagcac ccttattgc
1201 ggagagagaa gcgggcatca tcatatcac gggatcggat gaagcttga aagatgccgc
1261 caaggaaaac ctgggccttg gcgaggaagc agaactaggc accaagggcg tagatttcta
1321 cgtggtcatc cggcgtagcc ctgaagagac atggcaccta acaggagaag tgaagttca
1381 atccgacttt ggcggaacc aagacaacca gaaactagta gcaaaggctt ccataagggtt
1441 ggaccttgag aagaggcaca taggaatagt ggtgtgggac ggaatgcctg tggtagcaaa
1501 gtttcgtggg tgggcccggac tgggaaaaga aacgatcgtt acatccgtac tctccttcc
1561 agacctgata gcggagctct accaaaaggg tgaagaagcc ctgggcctct agaaggcggg
1621 cacaatctca aacttgtgct gtagcctggg gaaatcctct aacacccttc tagtgaaggc
1681 tttgaccgcc tcccaggagg catctatgcc gatggatcgc cgctttaaga ggggtgaggc
1741 tataagcgtg gtaccggagc ctgcgaaggg atcgagcact aaatccccct cgttactccc
1801 tgtttggacg atgagcttga gcatgtccag atttttctcg gtggggtatc gcgggtacgg
1861 aggatccttg aactgccaaa cgtcctggag cttcttcccc ttcttcaggc gatcccagc
1921 gtaaaccttc ttccggcgca ccccgcttct tgaccagaca ataagccctt gagcgtctag
1981 ctcgtcaagc ttctccgggg gatagcgcca atgccgtcca ggagggggaa gtattctcgc
2041 ccaaggcctt ccggtagggc catccttggg ttctccagga gcatgcaggg gattggtggt
2101 gtaccgttcc ccgttctcgt ctacaaaggg gaaaagccta gcgatctcct ctccgaata
2161 ggggctagcc gattcgttgc aaacgtagtc ccgcgtttg gtagtagcga ggcgtatgtc
2221 ctttgcgat ccgaaggcct tacgggaaaa gtitttggga ttgaagcga tgcgggcgat
2281 atgggtaacg aagtttcgcc ggccaaagac ctcatcaagg atgagcttca cctcgaacc
2341 gtatttctcg tctatgtgaa cgaagatcag tcctgagtc gccatcagct cctgagaag
2401 tatcaagcgc tccctcagga actccacaaa ctgaggacca tggagggtgt catcgtagcc
2461 caactgaccg tttttgggct ggctgacggg agcaacgcga tctgtttcat cgccgccaac
2521 gagaaactgc tggccgggtc cataaggcgg gtcaatatag accaactgga ccttccccgc
2581 ataccacca ggctcccga gcatccaccg gagaacctga ccgttttccc ccaaaaagta
2641 ggtgccaata ggatcaatct caaaaagggg ggcatttccc cctaggaaga ggagggttc
2701 ttttcgcaaa acaagtgtg ggggtggctg atcaagaatc tccttctcat cgcgttttc
2761 ggggtagacc aacctaaagg gcgaagggtc cgagggtttc gaggctttca agggggctt
2821 tcgggtcaaa ccagggtagc tacggctcat tcttccctcc ccacagcgt cttagcagg
2881 acctatcac ccacaacct cagcactcc aaccaaggaa tccgccaag gcggcctacc
2941 ttttagccc gtatcttccc ctgacgtata gaccttcgga tcgtctcagg gtgcaccga
3001 aggatgtctg caagctcctc gggggtcagg tacacgggct tcatcctcat gacacaacct
3061 taccacacag aggacaacac atgcaactat gggcaaaagta gacaacgaga ccaaaagctt
3121 gggccactct ctgaggaggc ctctttaggg gtcttacta ggtacgtcc cgtcgtgtc
3181 agatggccat ccgtgtaatc tcggataacc cgcattagga cggcaaatag atattgcgcg
3241 gggagtacac ccctggccac agcccacagc aagcctgcat agaacgtct tgaacgacgg
3301 tcatctagga gatcggaact gtacgtagca atgagggtga taaggggcgg gaggttggaa



FIG. 3B

3361	cgctccacct	cggggaggac	caggatgagg	cccagggtcaa	cggccacggt	cttgggtgtg
3421	ggcatcacc	ttttccctg	agcccagagg	accagcacgt	ccagggtggg	gcggaticcg
3481	tggctcctg	aggccttgac	ccagttgaag	gagagcacgc	cggtggccat	gtctagggcg
3541	aggttcctcc	aggggtagat	gtagtcgtcc	agggtagacc	tggctttccc	tggcctcagc
3601	cggacggccc	aaaggggtgcc	gatggcccgg	cgtccccgt	tgacggtttg	gtgaaggacg
3661	tcggtggcca	ccaggccctt	tttctcaagg	accttcttcc	aggcgtggac	ggctgtccgg
3721	gtgaccccca	ggttgagggc	caacatctcc	agggggacca	tgaagacgac	cgtccccacc
3781	ttcctccaga	gctcccgtt	gccgtagggg	atggtggagc	gggcaatctc	ctggaggagt
3841	tccagaagct	tctgaggccc	gtcctggacg	gcttgacata	cattcccaac	ggggggttca
3901	gctggttgta	tagggggggc	cccaacagag	gaaaggaaag	cctcatggtc	tttctcgggt
3961	aaagcaatcc	taagtgcctc	tttttggtat	gtaaagccct	tcgcgaggcg	attttcggca
4021	cctccatctg	gaggggggtc	ggtggccaag	aagaagtcct	ctgacccctt	atctgacccc
4081	ctagtggcat	cgggtgtgtc	gtgggtttcc	tctaaagcct	cgtaaagctc	ttcaaaagag
4141	gttttttctg	tcttcaccct	cggacctcct	tgcatcttgg	agcccagagg	gttacccctag
4201	gtcttggggg	tgatccgggg	caaccgcctc	ggtttcgctt	ttttatgggt	ccaaaataac
4261	cgtcagccca	gcggctggca	atcccccttc	ctaaaaggcc	gttataggcc	ctgtaggag
4321	gggggtagta	ctttcctacc	cccctaggct	tggagaggcc	ttaggaggtc	tcctagggcc
4381	tcgtgggggt	gtaggggtaa	cctcatggcc	aggccggccg	gctcgggact	ctggaggagg
4441	cctccatagc	ctactcgttg	tggaggtttg	tgaaggggtt	cactaatgca	tacggctagc
4501	ctcgggatca	cggccaaatg	gtatgcaggt	tttgggtata	aaccctcagg	tttgaggcta
4561	gtttatgtcg	gttttatgca	cctttgactc	ggatcacggg	cataaacacc	agtttcttgc
4621	acgaaagaaa	actttcgcga	tctaagaggg	ggaaagaggt	gtagaggggc	ggccttcatg
4681	aaagttaggc	tcttaggagg	ccgttgtaga	gggccgtctc	gggttcaaat	cctttccctc
4741	ttcttccagg	tttccgaggt	tcgaggtctt	ggtccaggtc	ttgtaccaag	tttttgacca
4801	aagtctattc	tcggaatata	ggggtatctt	gtctatcttc	cctacgggat	atctctgtct
4861	gtgtgaactt	gatcccatcc	caatacatat	ctcaatctcc	taatctcttc	ttctctccag
4921	atccctaate	tcttcttcta	cctctttctc	ctcccaatta	agaatggaga	ggaaaaaccc
4981	cgaccagaac	gagcttctcg	gggtcagttt	cggtaatctc	gggacagggt	ttcatcgtct
5041	aggacgagga	ttagggcatg	aaaaatgggc	tttgacaaaa	tctttctaaa	aaatactccc
5101	cgagggtggg	gaagtgcctt	cggggagaag	atttttggca	gtttagatgt	tatgtcttat
5161	cacggggccg	aggcctccac	gataagtgtg	cttggccaag	taccggggca	ggtcgggggt
5221	gctcttcagc	gtggtgatgg	tactttcacg	gaagttcaca	agtccittta	gaggcttcag
5281	gtcggggata	gtgctcaagt	actcccaagc	gttctcgggc	ccgtgggtcg	ggagaaggac
5341	aaaggggtcg	ggcaaaagt	catctttgta	cttaggacgg	attacttttag	cacctgataa
5401	cttcaggggc	gttaagaagg	gcctcacctc	ggagacgggt	ggaaggagga	cgtgggcgtg
5461	gaagaagacg	aaccccatt	tttgggaagt	ctccctccag	tttgatgatg	aacgttggga
5521	ggaagccggc	caggatgtct	ttcatcgcgc	ctcgaacctc	ggacacataa	aaaactttcg
5581	tgtttgtcag	ggcaagagt	ctatgtatga	ggtaaccttc	gggagtacaa	agtgcctcaa
5641	gccgcctttc	ccaacgctcc	aaaactctag	ggtcagggtg	tttaggtttt	ctgaaaaact
5701	ctagcttttc	agtggctatt	cctcaccctt	ctagcacgta	ctctggaagg	taaacttttg
5761	acacagcggc	caagtcctagc	gtctcccagt	ccagttggtc	tgggacgcgt	gagaagggga
5821	ggggcttggg	gtagaggacc	agaagaccc			

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FIG. 4

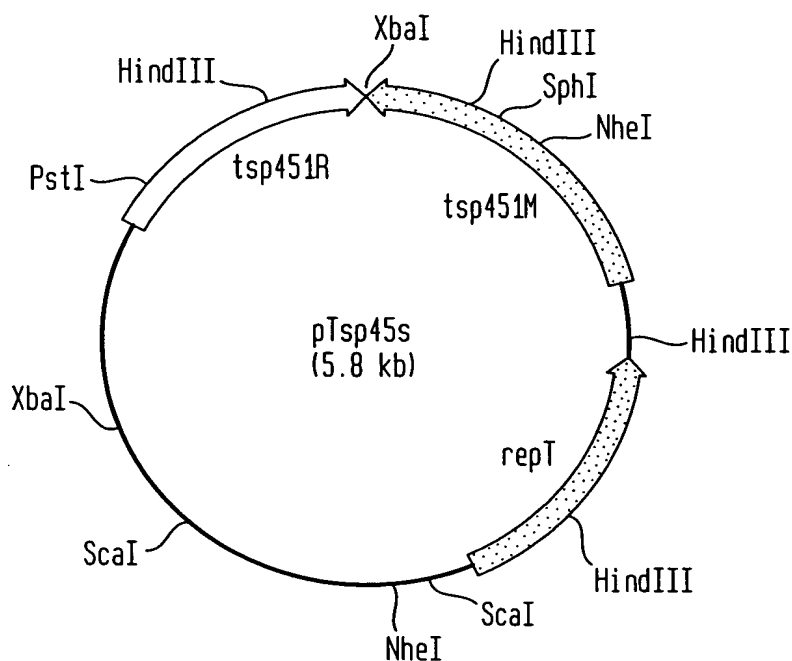


FIG. 5

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1  ATGATCGTGGCTGTCAACGGCTTCAAGGGAGGGGTGGGAAGACCACCACGGCGGTCCAC
   M I V A V T G F K G G V G K T T T A V H
61  CTGGCCTGCTTCTGGCCGAGCGGGGCCCCACCTGCTGGTGGACGGGACCCCAACCGC
   L A C F L A E R G P T L L V D G D P N R
121 TCGCCACGGGGTGGCACCAGGGGAGGCCTCCCGGTGACCGTGGTGGACGAGCGGGTG
   S A T G W H R R G G L P V T V V D E R V
181 GCGGCCCGGTACGCCCCGGGAGCACGCCACGTGGTCATAGACACCCAGGCCCGCCCCACG
   A A R Y A R E H A H V V I D T Q A R P T
241 GAAGAGGACCTCCGGGCCCTCGCCAAGGGGGTGGACCTGCTGGTCCTGCCACGTCCCCC
   E E D L R A L A K G V D L L V L P T S P
301 GACGCCCTGGCCCTGGAGGCCCTCCTGGCCACCCTGGAAGCCCTGCGGGGGCGGAGGCC
   D A L A L E A L L A T L E A L R G A E A
361 CGCTTCGGGTCTCCTGACCATGGTGGCCCCCGCCCCGAGCCGGGACGGGAGGAGGCC
   R F R V L L T M V P P P P S R D G E E A
421 CGGGCCCTCTTGGGGGCGGAGGGCGTTCCCTCTTACAGGCTGGGTGAGGCGGGCGGCA
   R A L L G A E G V P L F T G W V R R A A
481 GCCTTCCCCAAGGCCGCCCTCCTGGGGGTGCCTGTCTACCGGGTGCCCGACCCAGGGCG
   A F P K A A L L G V P V Y R V P D P R A
541 AGGCTGGCCTGGGGGACTACGCGGGGTGGGGGAAGAGCTCCTGAAGGAGGTGGGGGA
   R L A W G D Y A R V G E E L L K E V G G
601 TGA 603

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FIG. 6

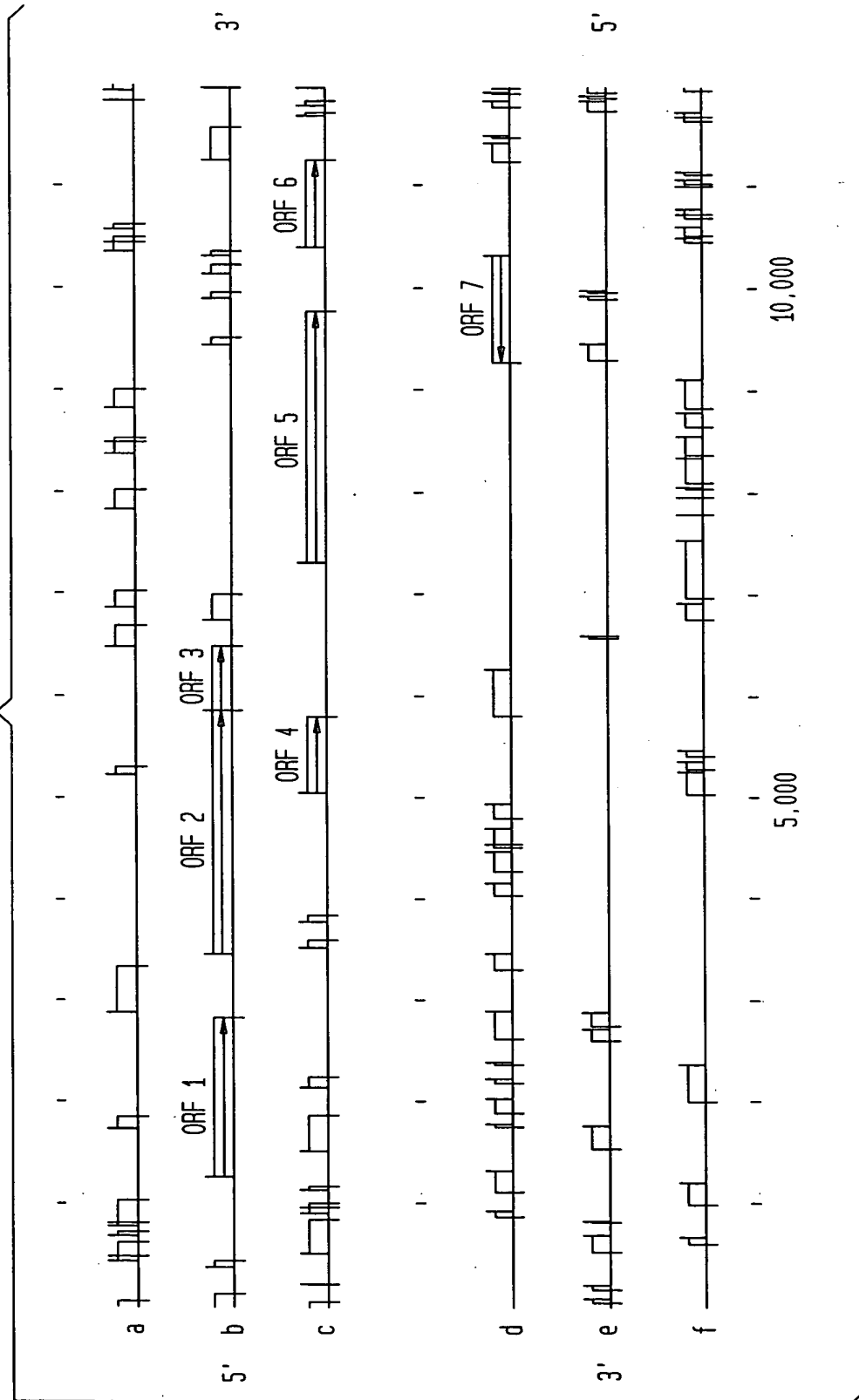




FIG. 7A

CTTATACACAACTATACACGTCTCTATCGGGCTTTTCTTAGCGCCATGTAAACACC 60
CCTCCCATCTCCGGGTGTTTACAGCGGATACGGGAGGTTACGCGGAACTTTTCCCTTG 120
TTGAAACTTTGGGGCTGAGGCTCAACAGCAGAACAGCTTAGGTTGACTCAACACAGCTC 180
ATAAGTCCCTTCATTATCGCCTGAGTCAACCTATGAGTTAACCTTTTTTCAAGAAAAGA 240
GATAAGTGAGTTTTGTCTCTAGCACGACTTTTTTCTTTGAGTCAACCTCTGTGCCGACC 300
CCCCGATTTTGAAGTCAACCCCCCTTTGAGCCGAACTTTGTTGGCACAGGGGTTGACTC 360
AGGGGTTGACTCAACGCGAATGGCCTCTGGAAGGGCTTGAGCCGACCCCTCCCTCGTG 420
GCCGACCCCGCTCCACTATGAGCAGGGGGAAAGTTACGGGAAAAGTCCCCAAGTCCC 480
CCTTGACAAAAGATGACAATCGAGTTAATGTACAGCGATGCGTCACTCACCTCTGGCTG 540
GGCTACCCAGATGCGTGCGGAACGTTTCAGAGCCTCCTTCGATTCTTGCCAGGGAGG 600
GGCGCTACCCACTGGTGTAGAGCTCGCCAAGGTGCTGGGGCGCAGCCGACGCCACGT 660
GGGCCATGCTCAGGGCTTTGACCCGTATGAGTCTGGAACGGCACGAGGGGCTATG 720
TTCTGACCCCTGCGGGCGTAGAACTTGCCAGGACCTGGGAACCACCGTGTGGCGTGGGG 780
ATGAGGAGGTACAGACGGCGTTACAGCTGCTAGGAGTGGTTCATGCCGCCGAGGACAGGC 840
GCTGAAGCTTTTGAAGCGGGGCCCTACCCAAGGCCACCCGGCTCCTCTCCCCTGGGAT 900
CCCAAATGGATCCCTCAGCGCATTATCCTCTGGCGGTCTATAGCGCAAGGAGGTAGT 960
GGTGACGAAACACACAAATGTTTCACCCACCTTTTGGATGCCGTAGAGGAGCTCGCTCG 1020
CCAGATTGCTGAAACCGCTAACAAGGCTTATTCAGCCATTTAGGCAGATTGTCAAAGT 1080
CCTGCCGCTGAGGTTCCCGACCTCTACGCTGGCTGGCCGCCCTGGATGACTCCGCCAT 1140
CGAGGAGCTTGCCAGCGCTGAGGGAGGTCGAGGGAAGCCCCGCCCTTTACCGC 1200
CGCCCTCAAAAGGCCCTGGCCATCGCCCTACAGCGCGGACCCTCGCCGAGATGCCCC 1260
CACGTTGCGCAACGCGCTCCGCTGGGCGATGGAACGGCAAGGGGTGAGCATCCGCAAGCT 1320
TGCGAGAGAGGTAGGGGTGAGCAAAACCACTGTTAAAAAGTGGCGTGGAGGCCGCTTGT 1380
CCCTCGTTCACGGACCTACGTGAGGAGGTTGAGGAGATCCTGGACCTCCCGAAGGCGC 1440
CCTTTGCGGACGACTACCCCGCTGGGGGTTGCCAAAAATATTGGAAGGTGTTGAGGGAA 1500
AGATGCCCTTATCCCGGTTACGCGGACCTTCTGCGCTGGCCGCCCTGGCGGCTA 1560
CGGCCGCCCGTGGGATGATCTCTCTCCGACGAACAGGAGGCCCTTCGGCGGAGGACGA 1620
AGACCGGTGGACCCGCTCTCAACCGCCAGAAGCGAGTGGAAAGGCCAGTCAAAACC 1680
TTTTCGGCTTTCTTTGACGAGTGGCCAACTGAGGCTCGAAAGAATGGGAGGACTACGA 1740
GCGCTATGCTCATCGGCACCTGGGAGCATCGCGCGCTGAGGCGGCGCTTGGCGGCGC 1800
ACCTCTGCTCCACGACCGTGGGACGGAACGCTCGAGCGTGAGCGGATACTTATAGA 1860



FIG. 7B

1861 ACTGTTCTACGGCTACTGTGTAACGAACGGGGCTCGACAGCAACGGCTTGAGCCTCGC
1920
1921 CCTCCTCACAGACCTGGAGCTCGTCCAATCGTACCTGGAGTGGCGCGTGAATAGGTACAA
1980
1981 GGACGAGGATTTACCCCCGTTACTCGATCGGAATACATGTTTATCGCCCTGGTGAAAA
2040
2041 ACTCCACAGAGGTTATCTCCGCGCCCTTGGGCTTGGGGTAGACCCGGACGGGGTGAAGA
2100
2101 GCTGGAACGGAACGAAAATCGCCGGAATTGATGTACGGACGGCTACCACGCGGTGGA
2160
2161 GCCCTCCTGGAACTCAGAGCCCTCCGCTGGGTGCTGGATGGCATCCGGCTCATGCT
2220
2221 CCGCGATGCGGCGGGGCGGGTAGGCAACCTGCTGACACCCAAATCCCACCGCCAAAAG
2280
2281 CGAAGCGGGCGAAGCGTTCCGCTCTACCGGGACGTCGTTCTGCTTTGGATGATGGTGGG
2340
2341 CCACCCCTCCGGGCGAAGCATTACTACGAAGCTCGCTTGGACATGAGCCAGTTCCAAGA
2400
2401 CGGGGATTTGCTCCCGGGCGGGGACACGTGGGGCGGGCGGGCGAGGGTACTACCTGGC
2460
2461 CTACCGCAAAGTGGAGTTCAAAAACGCCCGAGGCCAGGTCTTTCAGAGCCTCCAGGACCA
2520
2521 CGATCTCGTCACGTTCCCTGGACGACCCGAGCACCTGTCTGGTCTGGACGTGAA
2580
2581 CGGGATGCGGTACTCCCTCAACGAGCTCTTTCACGTCTACCTGCGCACGATCTCTCCCG
2640
2641 CCTGGCCAGGCTGGGCGGACCGGTCCCTCCTGCCCTGTTTCCGGGTGCCGATACG
2700
2701 AGGCTCAGACTTGGCACATCGTTGCGAGGCGCGCCGCTACGTGGCCGCGTGGCCGGG
2760
2761 GTACCCAGAACTTTTGCCCTTCGGCCCCACTCCATCCGCCACGTGGTGCCACGGAG
2820
2821 GTCGTGAAGCGCACGGGCTCTTTGAGGCGCGGCCAACGTGCTCTGGATAGCATAGAC
2880
2881 ATGGTCGTTGACATTACGCCGTTGTTCCCGCGACCGTAACAGTCACGGTTGGCGGG
2940
2941 CTAACGCCCGCGCCGGGGAGGTGAGCGGTGAGGGACCTCCACGACTTTTCTGCCCCG
3000
3001 GGTGGACGAACTGGTGCCGGAACCTTACCCGGGCGCGCGGGTGGGCGACGAGTGGCG
3060
3061 GGGGGCTCGGTCCAGGGCGAGCGGGGCGACAGCTGGCCGTGGACCGCGGAAGGGCTT
3120
3121 CTGGATCGACCACAACCCCTCGGCCCCGAGCCCCGGCAGGGAACCTCTACGCTGAT
3180
3181 CCAGGCGGCCAAGGGGCTCTCCCCGAGGAGGCCCGGCGCTGGGCCCAGCAGTGGCTTG
3240
3241 CCTCTCCCTTCGCCAAAGGTCAGGCGGACGAGGAGCTCAGGACCAAAGGCTTGAGTAC
3300
3301 TCAAGTGGTGGGAGCTCGGGTGCTCCAGTCCCTGAGTCTTCAGGTTCCAGGTACCTGA
3360
3361 GGAGTCGGACCCCTTTGACAACCCCGCTTCGGGACCTCTCAGGCGAGGGGCGAGGA
3420
3421 CGAGGCCCCCTTGGCCCCGGCTCCGAGGAGGTGCTGCGGCGCATGGTGTCTAGGCTTCT
3480
3481 CCGCACCCCGAGGCGGTGGCTACCTGAAGGGGCGCGGTCTGGATGCCCGGGTGGTCCG
3540
3541 CCGCTTCTACCTCGGCTGGACGACACCGCGGGCCACCGCGCCCTGGTCTACCCGGT
3600
3601 GATAGGGCCGGACGGCTCCCCGTTGCGCGCCACCTCTACTACGAGATCCCGGGCTCAC
3660
3661 CCAGGGCGCCCCGGGCAAGGGCTGGGGGAGGGGAGGCCACCACTACTGGGCGCTCC



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FIG. 7C

3721	CCCCCTTCGAGGGCCCCCTCCCCCGCCGCAAGCTCTTCTTGTGCGAGGGGGCGAAGGATGC	3780
3781	CTGGGCCCTCTGGCTCCACCTCCACGCCAGCCCTGGGCCCAGGACCTGGCGGTGGTGAC	3840
3841	CTCCACGCACGGCTCCGCCCTCCCCGAGGCTGGAAGACCCCTGTTCTGGGCCCTTG	3900
3901	GGAGGAGGTCTACCTGGGCCAGGACGCCGACTCCGCCGGCGAGGAGATGGCCCCGAAGGT	3960
3961	GGCGGAGGTGGCGAGGCGGCCGTCCGCCGCGTCCGGTCCCGAGGGGATGGGAAGGA	4020
4021	CTGGACGGAATACTTCTGGCGGGGGCACCCCGAGGGCTTGGCCTCTCTGGAGGG	4080
4081	AGCGGAGGTCTGGGAAGAAGAAGTGCTGGAGGTGGGGCCAGGATCCAGCTCCCGACCC	4140
4141	CGTGGACATCCAGCGGGCTTCGTGCGGGGCCACCTCTACGTCCCGTGGCGGTCTGGA	4200
4201	GAACCGGGGGGAAGAAGGGGCCGCTACCGACCGTGGTGGTCCGCTCCGACGGGGCCGT	4260
4261	CCTGGGCTGGGGCTACTTGGCGGGCCCGCCCGGACCCCTTGGAGGACGGGTGCTGGC	4320
4321	CGTGGACGACGGCACCATCATCCGAGGCCCGGAGGGCGCCGGGACCTCGTGGAA	4380
4381	CGGGGAGGCCATCAACCGCTTCTGGAAGCCCGGGCCGGGGAGTGAGCGCATGACCGT	4440
4441	GGCCCCCGGGACCTGCCTGGGCTCATCGTCCGCCACCTCCGCCAGGTGATCTCCCCAG	4500
4501	TGAGGACGGCTACCTCTGGCCGCTTAGGGGTGATGACCTCTACGTGCAGAGCGTCTT	4560
4561	CGACGCCGTGCCCTCTTCTCGTGGTGGGCCCCGCCGGGCTCGGGGAAGACGGAGTTGCG	4620
4621	CCGCCCTCATGGCCGAGCTGGGGGCCAACGGCGTGGTGATCACCGGCCAGACCTCCGCCG	4680
4681	CACCGCCGCCCGGATCATCGACGAGACGGGGGGCTGGTGGCTTCGACGACCTGGAGGA	4740
4741	GGTGGCCAGCGGTGGGGAGCGCTGAGGCCTCCAGCTGGAGCAGTTCTCAAGGTGTC	4800
4801	CTACAAGAAGGAGACCGGGTCAAGAGCTGGACGGACCAAGGGGATGGGGTCTCAC	4860
4861	CCTCAACTTCTTGGGGTCAAGGTGATCACCACACCCAGGGGACGGGGACATCTGGG	4920
4921	GAGCCGGATGCTGGTATCCGCACCGCCGCCCTCCGGGACCTGGGCAGAGGGGAGGAGCG	4980
4981	CCGCCCCGAGGGGCTCTCCCCCAGGCCCTCAAGAACTCCGGGACAACCTCTACATCT	5040
5041	GGGCCATGGAGAACGCGGCCAGCCTCCACGCCCTGTACCGGAGCGCTTCGCGGGCAAGG	5100
5101	GGGAGCGCTGGACGAGATCGCCGCCCTTGGCTACCATCGCCACCACTGGGGGACG	5160
5161	AGGAGCTGGCGGCCCGCTGGAGGACGCCCTGCGCCGGCAGGAAGGGCGCTGGAGGAGA	5220
5221	CCCTTTCCGATGCCGAGGTGGTGGAGACGCCCTCAAGGAGGCCATCCGCCAGGGCTACC	5280
5281	GGAGCCACGTGGCCCTGGTCCACGTGATCTCCAGGCCCGGAAGATCTTGGGGACGACT	5340
5341	GGGGCCGGGAGCGACCGTGGACATCCCCGGTGGCGGGACCCCAAGTGGGTGGGGCAGA	5400
5401	TCGCCAGCAACTACGGCTGGCGGGCCCCAGAAAGGCCCGTGAGGCCCGGCTTTGGGACA	5460
5461	AGCAGTTCGCATCATGCGCTGGAGGCCACCTTCGTGGAGCGGTGGTCAAGGGCTTCC	5520
5521	TCCAGGAGGGGATCCCTTGGAGCCCTGAAGCAACCCTGGCTTCTGCTGGACACCCC	5580



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FIG. 7D

5581	CTGCGCCGAGTCCGCTACCTGCACTGGTGGACCTCCGGCTGACAAGGAAAAGTGGCT	5640
5641	GGAGCGCTACGGGGAGGCCAAGCTGGCCAGAAAAGCGGGAGCTGGAGGAGGATTTTT	5700
5701	GGCCCTGGTGGGGCCCCAAGATGGCCTTGCCCTCCAGGCTCCGCCGAGGAGGAGGAGA	5760
5761	CCGAGGTAAGCACCCAAGTACCCAAGTACCCAAGACCCTAAAGCCTCAGGTACCGGAGGA	5820
5821	CCTCGGGGACGGAGGACCTAAACCCCAAGGGCGTAAAGACTGAGGTGAGAGGGATGAT	5880
5881	CGTGGCTGTCAACGGCTTCAAGGGAGGGGTGGGAAGACCACACGGCGGTCCACCTGGC	5940
5941	CTGCTTCTGGCCGAGCGGGGCCCCACCTGCTGGTGGACGGGACCCCAACCGCTCCGC	6000
6001	CACGGGGTGGCACCGGAGGGGAGGCTCCCGGTGACCGTGGTGGACGAGCGGGTGGCGGC	6060
6061	CCGGTACGCCCGGGAGCACGCCACGTGGTCTATAGACACCAGGCCCGCCCCACGGAAGA	6120
6121	GGACCTCCGGGCCCTCGCCAAGGGGTGGACCTGCTGGTCTGCCCACGTCCCCGACGC	6180
6181	CCTGGCCCTGGAGGCCCTCCTGGCCACCCTGGAAGCCCTGCGGGGGCGGAGGCCCGCTT	6240
6241	CCGGGTCTCCTGACCATGGTGGCCCCCGCCCGAGCCGGGACGGGAGGAGGCCCGGGC	6300
6301	CCTCTTGGGGGCGGAGGGCGTTCCCTCTTACAGGCTGGGTGAGGCGGGCGGCAGCCTT	6360
6361	CCCCAAGGCCGCCCTCCTGGGGGTGCTGTCTACCGGTGCCCGACCCAGGGCGAGGCT	6420
6421	GGCCTGGGGGACTACGCGCGGTGGGGGAAGAGCTCCTGAAGGAGGTGGGGGATGAGC	6480
6481	AAGTTCGCCAGGCTCCTCAAAGAGGTCAAGGAGAAGGAGGAGGCTCCGGGAGCGGCT	6540
6541	CGGGGAAGAGCCGGCGGGAGGACTACGTGGCCATGAAGGTCTACATCAGCAAAGAGCTT	6600
6601	CACCGGAGGCTGAAGCTGAAGGCCCTGGAGGAGGAGAAGGAGCTTTCGGAGCTGGTGGAA	6660
6661	GAGGCCCTGAGGAAGTTGCTGGTGTGACCTCCTCCCGCTCGTAGAGCGTAAAAGGAGG	6720
6721	TAAGACGATGGTCAACCTTAACAAATCGCCCTAGAAGCCCTTACGCGGGCACTCCCC	6780
6781	CCAGGAGCGGGCGTCTCTTGAAGCGCCTGGTCCGCAAGATATTGAAGGAACTCCACC	6840
6841	CCATCTGGAGCCAAGAGTTCGTGGATGTCGTCCCTTGGTCCGAGCACGCCACCCGCAAGG	6900
6901	GGCTCAGGGCCACGGACATCGGCGTGGACCTGGTGGGTACGGGAAGGACGACAAGGTCT	6960
6961	ACGCCATCCAGGTCAAGCTGTGGGATAAGCCCTCTCTTGAAGGACCTGGGAGCTTCG	7020
7021	TGGGGTGGTGAACCACCCGAGTACGGCTTCGACCAGGGCTCATCGTGGCCCAAGAG	7080
7081	GCCTGACCCAGGAGGCCGACCGCCAGCTCCAGGGCTACCCATCACCATCCTGAGCGAAG	7140
7141	AGGCTCTCTAGAAGACCTGGACCTGGAATCCCTCGTTCAGACCGCCCCGAGGAAGCCC	7200
7201	GCAGGCGGGGAAGAAGGCCCTCCGTAAGTACCAGCAAGAAGCCTTAGAGGAGGTGGCCA	7260
7261	AAGCCTTCTTAGAGAAGGGCTGCCCCGGGGCAAGCTCATCATGCCCCGGGCACGGGCA	7320
7321	AGACCCTGGTGGCCCTCAAGATCGCCGAAAAGGTGGCGGGCCCCGGGGGAGGGTCTCT	7380
7381	TCCTGGCGCCCTCCATCGCCCTCCTGGACAGTCCCTCAGGGCTGGGCGGCGAGGCTT	7440



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FIG. 7E

7441	CCTTGGCCCTTGGCCCTCTTCGCCGTGGTCTCGGACACGGGCGTGGGCAAGACCTCGGAGG	7500
7501	ACGACCTCTCCGCCCTCTCCCTCTCTCCATCCCTCTACCACCAAGCCTGAGGAGCTGG	7560
7561	CCTCCGAGGCCAAGACGGAGAGTCAGGAGGCCCTACCGTGGTCTTCTCCACCTACCACT	7620
7621	CGGCGGAGGTCTGGAGAGGGCCAGAAGGAGCACGGGCTTCCCCCTTTTGACCTGATGA	7680
7681	TCCTGGACGAAGCCACCGCACAGCCACGGTGGGGCGGAGAGAAGAAAGCCCTTCACCA	7740
7741	AGGTGCACCACGACCACTACGTGAAGGCCCGCCACCGCTCTACATGACGGCCACGCCCA	7800
7801	GGATCTGGGAGGTGGAGGGGAATGGAGAGAGGGGCAAGGAAAAAGCGGGGAAAAAGA	7860
7861	AGGACCCTCAGAAAGAGGGTTCTCTCCCTTTTGACCTCGGTGCCCTCTCTACGGAGG	7920
7921	ACTCCACGGCCCCGAAGGGGTGGAATCCTGGTCTACTCCATGGACAACGAGGGGATCT	7980
7981	ATGGCCCCACCCTCTACGAGTACACCTTCACCGCGCCGTGAAGGAGGGCCACCTGAGCG	8040
8041	ACTACAAGGTATCGTCTTCTCCGTGGCGGAGGAAGCCAAAAGACCTGGCCTCTACCT	8100
8101	TCCAGGACCCGAGGCCCTCAAGGTGGAGGAGGCTCTGAAGGCCCTGGGCCTGTGAAGG	8160
8161	TCCTCCAGGGGAGGTGCGGGACGAGGAGGGGAACCCGATGGGGGGCCTCGACCTGCGGA	8220
8221	GAGTCATCGCCTTCCACGGCCGGGTGAAGGAGTCCAAGGAGATGGAGGAAGAGTTCACGA	8280
8281	AGGTGGCCCTCGCTGCCCAGCAGGCTGGCCTCTTCCGAGGAGCTCCGGCGGGTGGAGG	8340
8341	TGAAGCACATAGACGGGCAGATGTCCGCCTATGACCGGAAGCGCTCCTGGACTGGCTTA	8400
8401	GGGAGAACGTCCCCGAGGGGGAGGTCCGCCTCTCACCACGCCAAGGTCTCACCAGG	8460
8461	GGATCGACGTCCCGGCCCTAGATGCCGTGGCCTTCATGCGTCCCCGGGACAGCGTGGTG	8520
8521	ACGTGATCCAGGCCGTGGGGCGGGCCATGCCAAGGCCCGGGCAAGGAGTACGGGTACG	8580
8581	TGGTCTGCCCGTGGTGGTGGGGGCGAGGACGAGGAGCGGGAGATCGAGGAGAGCGGT	8640
8641	ACCGGGCGGTGTGGCAGGTGCTCTCGGCCTTGGCGCTCGGTGGACAAGTCTTCGAGGCC	8700
8701	GCATGCGGGCCGCCCTGGTGCCTCTCGGGTAAGGGCGAGGGCGGGGAAGGTGGAGAGG	8760
8761	CCCGAGAGGGTGTGGCCGTATCGGGGAAGGAAGCGCTCCCCCGTGATCGTAGATGTC	8820
8821	TTCAGGGGAACCTCAACCTCCACCAGGAGTACCCGGAGCCTCGCCGGCAAGCTGGTCA	8880
8881	GGCGCCTCGCCCTGGGGCGGAAGTACCTGGAGAATGGGCCACGACGTGGCCCCGGGTGG	8940
8941	CGAAGGTGCTGGAGCAGCAGGTCAAGGCGATGGCGGAGCGGGACCCCAAGGTGAAGGAAA	9000
9001	AACTGGGGAACCTCCTCGCCGCCCTGCAGGCCCTTACCAGCGAGAGCGTGACGGAGGACG	9060
9061	AAGCCATCTCATGCTGGTCCAGCACGCTCTACCAAGCCCATCTTCGACGCCCTCTTCG	9120
9121	GGGAACTCCTAGAAAAGCGGGAGGACCCGTTTCCCGGGCCCTAGACGAACCTTCCAGG	9180
9181	AGTTCAGGGGGTCTCTGGACCGGAAGGGGAGGCCCTCAAGGATTTCTACGAAGAGATGC	9240
9241	GCCTCAAGGCCCTAGGGCTCACGGACGAAGCCGAAAGGGCCGACTTCTACGGAGGCTCT	9300



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FIG. 7F

ACTCCAACCTTCTCGCCCGGGCCTTCCCCAGGTGGCCGACCAGGTGGGGATCGCTACA
9301 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9360
CCCCGGTGGAGCTGGTGGACTTCTGGTGAAGAGCGCAGACGAGCTGGCCAGGAAGCACT
9361 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9420
GTTGGCCGGGGCTCGATGGGAGAAGGTCTTCATCTGGAGCCCTTCGCCGGCACAGGC
9421 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9480
ACCTTCGTCAACCGAATCCTGCACCGGTAGCCGAAAGGGCGGGGCCGACGCGGTCAAG
9481 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9540
GGCAAGCTGGAGCGGGGGAGATCTGGCCAACGAGATCCTTCTCTCCCTACTACGTC
9541 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9600
CTCAGGGCCAACGTGGAGAACACCACCTGGCCCTGACCGGGAGTACGTCCCTTCAAG
9601 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9660
GGGGCGTTCTGGCGACTCCTTCGGCTGGCGAGCTGGGGTATAGCGAGAAAAAGTTTG
9661 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9720
CATCATCCCGCTCTTCCCGAAGAATACGGTGAGGCCCTGAACGAGCAGCTGAAGGCCCC
9721 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9780
TATCCAGTTATCTCTCAACCCCCGTGCGGGCTTGTTGGAGAAGGAGGGCGAGGGG
9781 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9840
AAGAAGAACCCGTCTACCGTAAGGTGCGGAGCGGGTGGAGCCAACCTATGTACGGCGG
9841 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9900
GCCAAGGAACCTCCCATCGGGGGACAAAACCAAGGGAGAGAACCTGAACCTCCCTCTAC
9901 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 9960
GACCAGTACATCCAGGCCTTGGGGTGGCGAGCGACCGTATCGGGAGGAGGGGGTCTG
9961 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10020
GCCTTCGTCAACAAACGGGTGGCTGGGGGGCGTAGTGGCCCGGGGCTTGGGGCTCT
10021 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10080
TTGGCGGAGGAGTTCGCCGAGGTGTACGTCTACGACCTGAGGGGGATGCGAGGGAGAAG
10081 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10140
GGGGAGGCACGGAAGAAGGAGGGGGCGGGTCTTTGGACAGCCTTCCCGCGCGGGGTC
10141 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10200
TGCTCTCTCTCTGTTGAAGCGTAAGGACCACAAAGGGATCGGCAAGGTCCACCTCTAT
10201 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10260
CGGGTCGGGGACGGCTCTCCGGGAGGCCAAGCTGGCTCTGGTGAAGGAGCATGGCTCA
10261 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10320
GTCTCTGGGTTCCTGGCAAGAGGTTCCCTATGAAGAGTGGGTGGGGAGGCTTACCCCG
10321 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10380
GGTTCTCGGGATGTTGTCCCTGGACGAGGTCTTTGAGGTGCGGAGTTCTGGGTGAAGA
10381 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10440
CCAACCGGATGCCTACGTCTTCAACCCCTCCCGGGCGGAGCTGGAGCGGCACATGAGGC
10441 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10500
GGCTCATCTCCACCTACAACGAGCACGTGAAAAGGAAAAAGAGGGGAACTAGGGGAAC
10501 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10560
TGAAAAGGATGAGAGCATCATCAAGTGGGATAGGGAACCTACAGGTACCTAGAGTCCC
10561 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10620
TGAGGGAAGCTTCTACGAAGGAGCGGTCAAGTCTACGAGGCCCTTACCGCCCTTCG
10621 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10680
TGCCTATGTACCTTACCTCAGCCGCACTTTCAATAGCATGATTACCAAATCCCCGCA
10681 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10740
TCTGGCCCACCCCGAGGCCGAGAACCTGGCCATCGCCGTGGCCGGAAGGGGAGTAACG
10741 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10800
CTTTAGCGCTGTGGCCACCAGGAGGGTGGTTGACCTGCACCTTATTGAGACCACCCAGC
10801 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10860
TCTACCCCTTTACCACTACCCGAAAACAGCCCTCTGGGGGACACCCAAAGCGCAAGC
10861 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10920
TCAACCTCAAGGAGGAGTTCTTGAGGAAGCTTGGGGAGGTCTCGGCCGCCCCGTTCCCC
10921 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 10980
CCGAGGAGGCCTTCGTTACATCTACGCCGTGGTGAGCCACCCCTCTACGCCGAGCGCT
10981 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 11040
TCGCCAAGGACCTCAAGATGGACCTCCCCGATTCCCCTCCCCAAGATCCGAACTCT
11041 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 11100
TTGCCAGGCTGGTGAAGGCGGGTCAAGAACTATTACCTCCACACCGAGTACGAGACCC
11101 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 11160

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